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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,928	08/04/2003	Keigo Maki	P/2850-81	4958

7590 06/06/2007

Attention: Robert C. Faber
OSTROLENK, FABER, GERB & SOFFEN
1180 Avenue of the Americas
New York, NY 10036-8403

EXAMINER	
MACARTHUR, SYLVIA	

ART UNIT	PAPER NUMBER
1763	

MAIL DATE	DELIVERY MODE
06/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/633,928	MAKI, KEIGO	
	Examiner	Art Unit	
	Sylvia R. MacArthur	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 5-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3, and 5-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/4/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/23/2007 have been fully considered but they are not persuasive. Regarding the prior art of Koshiishi et al, applicant argues that Koshiishi fails to teach an inner electrode which is disposed on the second main surface of the ceramic based body and an insulating sprayed layer formed by a sprayed ceramic which covers the inner electrode, a connecting section of the inner electrode and the electricity supplying terminal. Koshiishi teaches a lower electrode (not shown) so that the RF power or DC power may be supplied to it through the lower electrode and Fig.1 illustrates the power supply 13 is located on the bottom of the ceramic base body. Since the power supply is shown connected to the bottom of the base body the examiner takes the position that the electrode is located within the vicinity of the connection to the power supply and within the vicinity of the second main surface of the body, as supported in [0030]. Applicant has not shown criticality of the electrode being located on the second main surface.

Koshiishi et al further teaches an insulating layer 14a which is formed by spraying according to [0031]. The layer does cover the electrode, and connecting second of the inner electrode, see Fig.1.

Claim Objections- Warning

2. Applicant is advised that should claim 1 be found allowable, claim 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight

difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3, 5, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koshiishi et al (US 2003/0106647) in view of Hirada et al.

Koshiishi teaches a ceramic base body (holder main body 11), an inner electrode discussed in [lower electrode, 0030], an electricity supply terminal (13), an insulating sprayed layer 14asee [0031], a temperature control part (temperature adjusting mechanisms 18 [0038], and the insulating layer are connected by a bonding agent layer 14b. The base body and temperature control part are formed unitarily, see Fig.1. Koshiishi further teaches a convex section 12 and a concave section 11, they mate together.

Regarding the insulating layer 14a being formed by spray (claim 1) or specifically a plasma jet method (claim 5), section [0031] recites that 14a,b are formed spraying on the ceramic.

this is a matter of a product by process limitation and is not given patentable weight. The layer is obviously capable of being formed by spray or specifically a plasma jet method.

Regarding claims 1, 3 and 8: Koshiishi fails to teach that the insulation sprayed layer has a thickness in the range of 20 micrometers to 500 micrometers. Regarding thickness of the layers, section [0032] recites that the smaller the thickness the lower the dielectric breakdown, the larger the lower the attracting force. Thus, the thicknesses are appropriately set.

Hirada et al teaches an electrostatic chuck with an inner electrode 4 and insulating layers 3,4 cover the electrode. Col. 3 lines 25-33 teach that the spray-coated layers have thickness of 30-300 microns.

The motivation to provide the apparatus of Koshiishi modified by Hirada to form the insulating layers by spraying and to provide the layers at a thickness within the range of 20 to 500 microns is that this range is a matter of optimizing the layer thickness to provide high productivity and good coating adhesion property as cited in col.3 lines 4-11 of Hirada et al. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to provide the insulating coating by using a spraying method to achieve a thickness within the range of 20 to 500 microns. Furthermore, it is well settled that the determination of optimum values of cause effective variables such as film thickness is within the skill of one practicing in the art, In re Boesch, 205 USPQ 215 (CCPA 1980).

Regarding claim 5: This claimed is interpreted as a product by process claim the insulation layer of Koshiihi is a sprayed layer, the process used to spray the layer does not structurally limit the layer of Koshiihi. Additionally, plasma-jet spraying is among the specific types of spray coating cited in col.3 lines 60-67 of Hirada et al. The motivation to use the plasma jet spraying method of Hirada et al is that it a suitable method of forming a thin layer as demonstrated in the prior art of Hirada et al thus the insulation layer will provide the necessary

insulation to the susceptor while maintaining the temperature control due to the thin layer formed.

Regarding claim 6: Koshiihi et al teaches that the sprayed layers comprise alumina according to [0032].

Regarding claim 7: The ceramic body of Koshiihi et al is seamless, see Fig.1 (built unitarily).

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sylvia R. MacArthur whose telephone number is 571-272-1438. The examiner can normally be reached on M-Th during the hours of 8 a.m. and 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sylvia R MacArthur
Primary Examiner
Art Unit 1763

June 4, 2007